Claims

Novel difluoromethanesulfonamide derivatives represented by the formula

$$R^{1}$$
 R^{2}
 R^{2}
 R^{3}
 R^{3}
 R^{3}
 R^{3}
 R^{3}
 R^{4}
 R^{2}
 R^{4}
 R^{2}
 R^{4}
 R^{4}
 R^{5}
 R^{2}
 R^{4}
 R^{5}
 R^{5

wherein

X represents halogen,

Y represents CH or N,

R¹ represents hydrogen, and

R² represents hydrogen or hydroxy; or

R¹ and R² together with the carbon atom to which they are bonded may form C=O.

2) Compounds set forth in Claim 1 wherein

X represents fluorine or chlorine,

Y represents CH or N,

R¹ represents hydrogen, and

R² represents hydrogen or hydroxy, or

R¹ and R² together with the carbon atom to which they are bonded may form C=O.

3) A process for preparing the compounds of the formula (I) according to

claim 1

wherein

X, Y, R^1 and R^2 are defined as in claim 1, characterized in that

a) compounds of the formula (II)

$$R^{1}$$
 R^{2}
 R^{2}
 R^{3}
 R^{3}
 R^{3}
 R^{4}
 R^{3}
 R^{4}
 R^{5}
 R^{7}
 R^{7}
 R^{7}
 R^{7}
 R^{7}
 R^{1}
 R^{2}
 R^{2}
 R^{3}

wherein

X, Y, R¹ and R² have the same definition as aforementioned, are reacted with difluoromethanesulfonyl chloride in the presence of inert solvents, and if appropriate, in the presence of an acid binding agent, or

b) in case that R¹ and R² together form C=O with the carbon atom to which they are bonded:

compounds of the formula (lb)

$$H_{3}CO$$
 $H_{3}CO$
 $H_{3}CO$
 $H_{3}CO$
 $H_{3}CO$
 H_{3}
 $H_{3}CO$
 H_{3}
 $H_{3}CO$
 H_{3}
 $H_{3}CO$
 H_{3}
 $H_{3}CO$
 H_{3}
 $H_{3}CO$
 H_{3}
 $H_{3}CO$
 H_{3}

wherein

X and Y have the same definition as aforementioned, are reacted with an oxidizing agent in the presence of inert solvents, and if appropriate, in the presence of an acid catalyst,

or

c) in case that R¹ represents hydrogen, and R² represents hydroxy: compounds of the formula (Ic)

$$H_{3}CO$$

H-SO₂—CHF₂

(Ic)

wherein

X and Y have the same definition as aforementioned, are reacted with an alkali metal hydride complex compound or a borane complex

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in the presence of inert solvents.

- 4) Herbicidal compositions, characterized in that they contain at least one compound of the formula (I) according to claim 1.
- 5) Process for combating paddy field weeds, characterized in that at least one compound of formula (I) according to claim 1 is allowed to act on paddy field weeds and / or their habitat.
- 6) Use of a compound of the formula (I) according to claim 1 for combating paddy field weeds.
- 7) Process for the preparation of herbicidal compositions, characterized in that a compound of the formula (I) according to claim 1 is mixed with extenders and / or surface active agents.